G. R. S. 59]

GPB—15,000—20.12.15

GENERAL AND REVENUE SECRETARIAT.

1913-14

(Sanitary)

File No. 91-13

Serial Nos. 394

Papers Filed.

Month May 1914

SUBJECT.

Instructions issued to the Sanitary Officers posted for work in connection with the Malaria Improvement Scheme

PREVIOUS REFERENCES.	LATER REFERENCES.
G.O. no 8036-84/med 24-13-15 d 24/2/14	Sany 122-1488/1-4. B. Nov. 1915- San 88-1681/1 B Sept 1917

P Kumaran 9/5/14

G.R.S. 11] 1913

GENERAL AND REVENUE SECRETARIAT.

(Sanitary)

NOTES

File No. 91-13.

FILE HEADING.

Arrangements for Sanitary work in connection with the Malnad Improvement Scheme.

From

The Sanitary Comr in Mysore

No. 4185 Dated 1-4-14 Received 3/6-4-14.

Diary No. 5625	Enclos. 2	Spare Copies. nil	Serial No. 3

BRIEF ABSTRACT OF LETTER.

Submits for the information and approval of Govt a copy of the instructions issued to the Sany. Officers posted for work in Connection with the Malnad Improvement Scheme, as required in para 5 of G.O. no 8770-57/San 91-13-2 dtd 3.14

NOTES AND ORDERS.

available as ... up for ... apply was incom... ... of S

1) Para 5 of G.O. no 8770-57/San 91-13-2 dated 24-3-14 requires that a copy of the instructions should be submitted to Govt only for information So Govt approval does not seem to be strictly necessary for these instructions.

NOTES—First Sheet.

GPB—35,000—15-6-12

G. R. S. 12]

General and Revenue Secretariat. | Sanj File No. 91 of 1913

Serial No.

2) The following seem to be the special features of the memo of instructions

(i) A monthly tour programme, to be prepared by the Sanj officer in consultation with the Secretary of the committees and approved of by the Dy comr has been prescribed. The Sanj officer is also required to keep a diary of the places visited by him, which has to be sent every week to the Dy Comr (through the Secretary) and with his remarks to the Sanj comr

(ii) A note drawn up by the Director of Public Health Institute in the matter of ~~the~~ Sanitary Survey & Laboratory investigation needed for identifying malaria spreading mosquitoes (referred in para 12 of the G.O. of 24th Feby 14), is sent to each Sanj ~~comr~~ officer for suitable action on the lines indicated, and a monthly progress report has been called for in the matter.

(iii) Special stress has been laid on the duty of the Sanj officer in spreading sound ideas of sanitation &c (referred to in para 6 (6) of the G.O. of 24-2-14) by means of lectures, pamphlets &c. and

NOTE—Contn. sheet.

GPB—60,000—7-11-18

5655

G. R. S. 12]

General and Revenue Secretariat. | Sany File No. 91 of 1913

Serial No.	
	in regard to the improvement of the System of Registration of Vital Statistics and investigation into the causes of abnormal ~~dea~~ number of deaths in particular localities.
	(iv) The Sany. officers have been instructed to submit through the Committees proposals for ~~increase~~ any clerical or menial establishment or furniture and other equipment that may be necessary for facilitating their work.
	3). It is however a point for consideration whether the establishment included in the proposition statement annexed to the G.O of 24-2-14 does not include that required for the Sany officers also.
	Subd for orders
	4) Draft recording
	5) Submd with a draft as directed.
4	From the Sany Comr no 4292 of 7-4-14.
	Forwards certain forms referred to in

I (Reg T think it does. But the proposals of the S.C. may probably be awaited. Arm

egR (120) 6-4-14 BS

Arm 8/4

egR (120) 8-4-14. BS ~~Dr Sec~~

Arm 8/4.

NOTE—Contn. sheet.

GPB—60,000—7-11-13

5633

G. R. S. 12]

General and Revenue Secretariat.

Sanj File No. 91 of 1913

Serial No.

the Memo of instructions received with Sl 3.

Submd with the preamble of the draft G.O. slightly altered.

Capt (120) 11-4-14

Asst 11/4

Bse

Dy Secy

The Sanitary Commissioner has promptly issued the necessary subsidiary instructions in regard to the duties of the Sanitary officers of the Malnad area and the relation of such officers to the other officers of the District Sanitary Branch.

The instructions seem generally suitable and no action is needed in regard to them here as they are submitted for information under the order already passed.

Deputy Secy 14/4

Second member & Dewan

Asst 14/4

Well 16/4

2 17/4

9031 18-4-14

b Asst 17/4

Lieu 25-4-14

Ch Secy 28/4 Asst 28/4

7 Q/5

NOTE—Contn. sheet.

GPB—60,000—7-11-13

Sp. 4185
Enc 2

Office of the Sanitary Commissioner
with the Government of Mysore,

Bangalore dated the 31st March 1914.
18th April 14

D5655
Medl. 24-13-30.

From

Rao Bahadur
T.V. Arumugam Mudaliar Esq.,
Sanitary Commissioner with the
Government of His Highness the
Maharaja of Mysore, Bangalore.

To

K.K. Srinivasa Iyengar Esq., M.A.,
Secretary to the Government of His
Highness the Maharaja of Mysore,
General & Revenue Departments,
Bangalore

Sir,

With reference to para 5 of Government Order No. 8770-5 Sany. 91-13 dated the 24th Instant, I have the honor to submit herewith for the information and approval of Government, a copy of the instructions in regard to duties issued to the Sanitary Officers posted to the malnad.

I have the honor to be,

Sir,

Your most obedient servant,

T.V. Arumugam

Sanitary Commissioner.

P.H.

W
2/4 [illegible]

190 [illegible] 6-4-14.

From C G 62 3/4

The Sanitary Commissioner
in Mysore, Bangalore.

To

The Secry. to Govt.,
Gen. & Rev. Deptts.,
Bangalore.

Dated 31st March 1914.

Despatched 18th April 1914

Received

General No. 4185
No.

Enclosure No. 2

Submitting copy of memorandum defining the duties of the Sanitary Officers posted for the Malnad Improvement.

GPB—2,00,000—12 4-09

Official Memorandum.

Mr. J.V. Karve, Special Sanitary Officer will have jurisdiction over the following areas:

The whole of the Sagar Nagar and Thirthahalli Taluks, whole of the Kumsi Sub Taluk except the portions of the Harnahalli Hobli lying to the right of the Bangalore Honnavar Road, the Kasaba and Belandur Hoblis of the Shikarpur Taluk and the Kasaba, Chandragutti and Ulivi Hoblis of the Sorab Taluk.

2. The area placed under the charge of Mr. M.G. Samuel will comprise the whole of the Mudigere and Koppa Taluks and of the Yedahalli Sub Taluk, the Lingadahalli and Lakvalli Hoblis of the Tarikere Taluk, the whole of the Chickmagalur Taluk with the exception of the Kalasapur, Mirale and Lakya Hoblis, the whole of the Manjarabad Taluk and of the Alur Sub Taluk and the Madihalli, Bikkoda, Arehalli and Kasaba Hoblis of the Belur Taluk.

3. The primary duty of the Sanitary Officer will be to assist the Special Revenue Officer placed in charge of the Malnad Improvements and to carry out such instructions as may from time to time be issued by the Committees for the mitigation of the causes tending to contribute towards the increase of diseases and deaths in the area. In addition to this duty he will, as District Sanitary Officer, supervise the vaccination and sanitation, advise on the sanitary condition of houses selected for demolition, on the disinfection of wells, the arrangement of health or segregation camps, selection of village sites etc

4. He should draw up every month a programme of tour (Form I) for the month following in consultation with the Secretary to the Committees. He should submit a tour

3

tour programme for each month to the Deputy Commissioner a week before its commencement and adopt such modifications as may be directed by the officer. He should keep a diary (Form II) showing the places visited and should send it weekly to the Deputy Commissioner through the Secretary to the Committees. The Deputy Commissioner will return the diaries to him with his remarks or orders, for needful action and transmission to the Sanitary Commissioner.

5. The tours of the Sanitary Officer should be specially planned so as to enable him to carry out such preliminary surveys as may be decided upon by the Committee, to check the work of the Executive staff placed under him including Vaccinators, and to systematically supervise the registration of vital statistics in villages. It will be his business to see that in all towns and villages the regulations in regard to sanitary matters including vaccination are strictly observed. It will be part of his work to bring home to the people a knowledge of sanitary matters and for this purpose he should lose no opportunity of delivering public lectures on matters relating to public health and sanitation. He may from time to time frame simple rules relating to personal and domestic hygiene and submit them to the Committees for approval and wide distribution.

6. Among other matters the following should also claim the attention of the Sanitary Officer - sanitation of schools, epidemic prophylaxes etc.

7. It will be the duty of the Sanitary Officer to bring from time to time to the notice of the Committees cases where the need of water-supply or drainage schemes is specially indicated. Where such needs are recognised

recognised by the Committees they will be included in a register of schemes which require attention immediately or in the near future. This register will record a field of work requiring attention and will enable the Committees to decide as to the order of urgency in which the various schemes are to be taken up. As far as possible workable details and the approximate estimated cost should be furnished.

8. One of the most important duties of the Sanitary Officer is the supervision of the registration of vital statistics. He should as frequently as possible inspect the village registers, verify the entries by personal enquiries on the spot and, in cases where gross negligence in the maintenance of the register is evident, bring the matter to the notice of the Deputy Commissioner through the Secretary to the Committee. Where in his opinion, the recorded figures deviate too much from the normal and he has reason to believe that the abnormality is to a certain extent due to the prevalence of particular diseases, he should report the fact to the Committee with such suggestions as he may have to offer for the collection of accurate statistics for determining the extent of prevalence of such diseases. For this purpose, a number of typical villages near to one another may be grouped and special arrangements made for the correct registration of vital occurrences therein. In this way it might be possible to fix a standard of Birth and Death rates and the average duration of life in those areas.

9. In regard to the sanitary survey and Laboratory investigation needed for identifying the species of mosquitoes which spread malaria, a note drawn up by the Director of the Public Health Institute indicating the

the lines on which work should be conducted is appended for the guidance of the Sanitary Officer. A monthly statement showing the progress of work in this direction should be submitted through the Committee, for the information of the Sanitary Commissioner.

10. To prevent over-lapping of functions and control, the District Sanitary ~~Officer~~ Assistant of Hassan and the Deputy Inspector of Vaccination of Shimoga will be placed in entire subordination to the District Medical and ex-officio Sanitary Officers of the respective Districts and the duties of these officials will hereafter be confined to the areas other than those marked out as malnad tract The Sanitary Officer should in consultation with the District Medical Officers concerned submit proposals for a re-distribution of vaccination circles so that the jurisdiction of vaccinators may not at one and the same time lie in both malnad and maidan tracts.

11. The District Sanitary Officer will ordinarily correspond with the Deputy Commissioner through the Secretary to the Committee. But in matters not, directly or indirectly, connected with malnad improvement or in matters which are purely technical and professional he may address the Deputy Commissioner or the Sanitary Commissioner as the case may require, direct.

12. He may if necessary submit through the Committee proposals for establishments, clerical and menial, furniture and other equipment he requires for facilitating his work.

Sanitary Commissioner.

P.H.

A note on the Sanitary Survey and Investigation needed for identifying the species of mosquitoes which spread malaria in the malnads, by the Director of the Public Health Institute.

A large map of each Taluk showing all the villages should be prepared. A systematic survey of each village should be made with a view to locate all swamps, pools of stagnant water, tanks, wells, ricefields etc and each one of them should be marked on the map.

Adult mosquitoes from each house in a village should be collected, duly labelled with particulars e-g date, village, name of house-owner etc and sent in test tubes to the Sanitary Officer. He should make a naked-eye examination of all the adult mosquitoes received and determine whether they are Culicines or Anophelinae. The proportion of Anophelinae to the Culices should be determined for each village. All the Anophelinae should be dissected and examined microscopically and all those that contain malarial Parasites must be identified and the particular variety of malarial Parasites found, noted. The places where the infected Anophelinae were found must be noted on the map by a special mark. Then a search must be made where these special mosquitoes breed. Measures should be taken either to fill up the breeding places, drain them or if either course is not possible, to clear them of all weeds, to stock them with larvicidal fish and treat them with some preparation of kerosine oil.

Larvae from all breeding places in and around each village must be collected in special jars, duly labelled with particulars e-g date, village, nature of breeding place etc and sent to the Sanitary Officer. He should first make a naked-eye examination of all the larvae thus

thus collected and see which of them belong to the Culices and which to the Anophelinae. Adult mosquitoes should be bred out of the larvae and their genera and species must be identified. Their morphology and life-history must be studied. The adult mosquitoes bred out of the larvae must be experimented with, to see if they are capable of transmitting malarial parasites. Such mosquitoes must be fed upon various substances commonly found in their natural surroundings and the influence of different kinds of food on their ability to transmit malarial Parasites must be noted. Attention must be paid to the following: how the larval period varies with species, food, efficient temperature, sunlight and environment: duration of life of the male and female mosquitoes in captivity and freedom Actual infecting experiments must be performed. The effect of light and darkness, humidity and dryness etc on their power to bite men must be determined. The sexual cycle of the different varieties of malarial Parasites in the bodies of different species of mosquitoes must be worked out and the number of gametes ingested by the mosquitoes must be determined. By these experiments, it is possible to find out which species of mosquitoes alone is responsible for the transmission of a particular variety of malarial Parasite. This would limit the field of operations of Sanitary Officials. The breeding places of special mosquitoes noted on the map should be dealt with as described above.

Other aspects of Antimalarial campaign are not dealt with in this sketch.

The Sanitary Officer will be able to say what establishment he would require for scientific and other work which has to be done under his supervision.

" Copy " Sanitary Commissioner.

P.H.

4292
Gen S

Office of the Sanitary Commissioner
with the Government of Mysore,

Bangalore dated the. 7th April 1914.

D 5738
Sanj 91-13-4

From

R a o B a h a d u r
T.V. Arumugam Mudaliar Esq.,
Sanitary Commissioner with the
Government of His Highness the
Maharaja of Mysore, Bangalore.

To

K.R. Srinivasa Iyengar Esq., M.A.,
Secretary to the Government of His
Highness the Maharaja of Mysore,
General & Revenue Departments,
B a n g a l o r e

Sir,

In continuation of my letter No. 4815 dated the 31st Ultimo, I have the honor to enclose theforms relating to the tour programmes and diaries of District Sanitary Officers posted to the malnad tracts.

I have the honor to be,

Sir,

Your most obedient servant,

T.V. Arumugam

Sanitary Commissioner.

P.H.

IV

8/4

From 191

The Sanitary Commissioner
in Mysore
Bangalore

To

The Secretary to Govt.
Genl & Rev Depts
Bangalore

Dated APR 1914

Despatched

Received

General No. 4292
No.

Enclosure No. 5

Forwarding the enclosures
to this Office No 4815 A181-3-14

1.

Form I.

Programme of work to be done by the District Sanitary Officer ..... District for the month of 191

Taluk	Village number	Name of Union, village, hamlet or other place to be visited.	Probable date of visit	Probable date of departure	Distance from head quarters	Distance from last village visited.	Date of last visit	Purpose of visit	Remarks.
	2	3	4	5	6	7	8	9	10

Office of District Sanitary Office,
..... District,
Dated 191

for Sanitary Commr.

District Sanitary Officer.

Enclosure 4/4

Form II – A

Diary of the District Sanitary Officer for the week ending 191

Date	Name of Place visited	Population	Distance from Head Quarters	Distance from last place visited	Date of last visit	Nature of work done.	General remarks as to Sanitation, Vaccination, registration & epidemics if any, prevailing.	Summary of recommendations made during the week.
1	2	3	4	5	6	7	8	9.

Office of District Sanitary Officer,
..... District,
Dated ..... 191 .

For Sanitary Commissioner

District Sanitary Officer.

Form II - B.

Report on the Sanitary Condition of ____ in the Taluk of the District by the District Sanitary Officer.

Vital Statistics.

Population (Census 1911).

Last three years.	Births	Rate per mille of population.	Cholera		Smallpox		Fevers		Dysentery & Diarrhoea		Other causes		Total deaths	Rate per mille of population.	Deaths of infants below one year of age	Deaths of children under five years.
			No	P.C of total deaths	No	P.C of total deaths	No	P.C of total deaths	No	P.C of total deaths	No	P.C of total deaths	No			

Result of verification by Inspecting Officer.
Condition of registers.
Remarks.

The Sanitary Agency
For Sanitary Commissioner

District Sanitary Officer.

Form II – C.

Vaccination

Last three years	Total number vaccinated	Number vaccinated successfully	Number vaccinated under one year of age	Number of revaccinations.	Number verified by inspecting officer.	Nature of lymph used.	Unprotected lists maintained or not.	Remarks.
191								
191								
191								
Total								

Thomson Ryrie

For Sanitary Commissioner

District Sanitary Officer.

Sudbury

Form III

Statement showing progress of Anti-malarial operations in the District for the months of

Give names of villages in which swamps &c were located.	State whether Anaphelinae mosquitoes were found and in what proportion.	State the experiments carried out during the months in connection with the Life history of the mosquitoes with result.	State the nature and extent of improvement if any effected in each village.

Sweeper 13

Ram Sarup

For Sanitary Commissioner

District Sanitary Officer.